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Schillerstr. 5

BM553 Monoclonal Antibody to Keratan-Sulfate - Ascites

Quantity: 0.1 ml

Background: Catalyzes the transfer of sulfate to position 6 of galactose residues of keratan. It has a

preference for sulfating keratan sulfate, but it also transfers sulfate to the unsulfated polymer. The sulfotransferase activity on sialyl LacNAc structures is much higher than the corresponding desialylated substrate, and only internal galactose residues are sulfated. It also may function in the sulfation of sialyl N-acetyllactosamine

oligosaccharide chains attached to glycoproteins. It participates in biosynthesis of selectin ligands. Selectin ligands are present in high endothelial cells (HEVs) and play

a central role in lymphocyte homing at sites of inflammation.

Aggrecan is the major proteoglycan of human articular cartilage. The core protein is

substituted by a number of keratan sulfate and chondroitin sulfate

glycosaminoglycan chains. Whereas chondroitin sulfate is widely distributed throughout the body, keratan sulfate is primarily expressed in cartilage (joints,

trachea, intervertebral discs) and cornea.

Host / Isotype: Mouse / IgG2b Clone: 1A3 (EFG-11)

Immunogen: Human Articular Cartilage Proteoglycan digested with Chondroitinase ABC.

Format: State: Liquid Ascites without preservatives.

Applications: ELISA: 1/5,000-1/20,000.

Western Blot: 1/1,000-1/4,000.

Radioimmunoassays: 1/30,000-1/500,000.

Other applications not tested. Optimal dilutions are dependent on conditions and

should be determined by the user.

Specificity: This antibody recognizes both skeletal and corneal Keratan Sulphate chains either in

isolated or proteoglycan-bound form.

The epitope is resistant to proteolytic or alkaline cleavages and partially sensitive to

Keratanase or other Endo-B-Galactosidase treatment.

Species: Human. Reacts with Mouse, Pig, Sheep, Bovine and Canine (Dog). Does not

react with Rat and Chicken. Other species not tested.

Storage: Store the antibody undiluted at -20°C.

Avoid repeated freezing and thawing. Shelf life: one year from despatch.

General Readings: 1. Poole CA, Glant TT, Schofield JR. Chondrons from articular cartilage. (IV).

Immunolocalization of proteoglycan epitopes in isolated canine tibial chondrons. J

Histochem Cytochem. 1991 Sep;39(9):1175-87. PubMed PMID: 1717545.

2. Papageorgakopoulou N, Theocharis AD, Skandalis SS, Vynios DH, Theocharis DA, Tsiganos CP. Immunological studies of sheep brain keratan sulphate proteoglycans.

Biochimie. 2002 Dec;84(12):1225-8. PubMed PMID: 12628299.